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APPLICATION NO.	PLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/082,251	10/082,251 02/26/2002		Tomihisa Ohta	112053	3481	
25944	7590	08/07/2003				
OLIFF & F		GE, PLC	EXAMINER			
P.O. BOX 1 ALEXAND		22320		HŲANG, EV	ANG, EVELYN MEI	
				ART UNIT	PAPER NUMBER	
				1625	R	
				DATE MAILED: 08/07/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Applicati n N .	Applicant(s)	
_	10/082,251	OHTA ET AL.	
Office Action Summary	Examiner	Art Unit	
	Evelyn Huang	1625	
The MAILING DATE f this communicati n app Peri d f r Reply	ears n the cover sheet	with the correspondence ad	dress
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	86(a). In no event, however, may within the statutory minimum of rill apply and will expire SIX (6) No cause the application to become	y a reply be timely filed thirty (30) days will be considered timely fONTHS from the mailing date of this of ABANDONED (35 U.S.C. § 133).	
1) Responsive to communication(s) filed on 11 J	uly 2003 .		
2a) This action is <b>FINAL</b> . 2b) ⊠ Thi	s action is non-final.		
Since this application is in condition for allowat closed in accordance with the practice under a Disp sition of Claims			e merits is
4)⊠ Claim(s) <u>1-5</u> is/are pending in the application.			
4a) Of the above claim(s) is/are withdraw	vn from consideration.		
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1-5</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/or	election requirement.		
Application Papers			
9) The specification is objected to by the Examiner			
10) The drawing(s) filed on is/are: a) accep		*	
Applicant may not request that any objection to the	• • •	•	
11) The proposed drawing correction filed on		disapproved by the Examination	er.
If approved, corrected drawings are required in rep	-		
12) The oath or declaration is objected to by the Exa	ammer.		
Pri rity under 35 U.S.C. §§ 119 and 120		2 0 440/ 2 / 12 / 12	
13) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C	J. § 119(a)-(d) or (f).	
a)⊠ All b)☐ Some * c)☐ None of:			
1. △ Certified copies of the priority documents		A 11 (1 A)	
2. Certified copies of the priority documents			
<ul> <li>3. Copies of the certified copies of the prior application from the International Bur</li> <li>* See the attached detailed Office action for a list of the certified copies of the prior application.</li> </ul>	eau (PCT Rule 17.2(a)	).	Stage
14) Acknowledgment is made of a claim for domestic	priority under 35 U.S.	C. § 119(e) (to a provisional	application).
<ul> <li>a)  The translation of the foreign language pro</li> <li>15) Acknowledgment is made of a claim for domestic</li> </ul>			
Attachment(s)			
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice	ew Summary (PTO-413) Paper No( of Informal Patent Application (PTO	

Art Unit: 1625

#### **DETAILED ACTION**

Page 2

1. Claims 1-5 are pending.

### Election/Restrictions

2. In response to the restriction requirement, applicant has elected with traverse the group I invention, drawn to the biphenyl compound of formula I, and the composition and method of use thereof. Claims of the other groups of inventions are withdrawn from further consideration as being drawn to the non-elected inventions. Deletion of the non-elected subject matter from the claims is recommended.

Applicant argues that the groups I, II, III, IV, VI share a common biphenyl core structure and the search is not burdensome. On the contrary, the Markush groups of compounds in the instant claims do not share a common utility and a substantial structural feature disclosed as being essential to that utility. The compounds of the various groups have utilities other than what is being disclosed. For example, the compound of Group I in soldering flux is used on printed-circuit boards for easy cleaning with freon 113 (JP 63132795).

A reference anticipates the biphenyl compounds of group I does not render obvious the binaphthyl, biquinolinyl, bi-anthracenyl, bi-acridinyl or bi-benzoquinolinyl compounds of groups II-VII inventions. Since these different groups of compounds are structurally so diverse that they are classified in different classes and subclasses, the search is not co-extensive and is burdensome. For example, the structure search for group I compound alone yields hundreds of answers. Since the search required for group I invention is not required for the other groups, the restriction requirement as indicated is therefore proper.

## Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1625

Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. Claims 1, 2, 5, 'derivative' and 'derivatives thereof' are open-ended and is therefore indefinite.
- b. Claim 2, it is unclear whether it is a composition claim or a compound claim. Amending the claim to the format of a composition claim or method claim is recommended.
- c. Claim 1, definition of R, does applicant intend 'iPt' to be 'iPr'?

# Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 63132795. The compounds of the following structures are encompassed by the instant claim 1. Assuming claim 2 is a composition claim, the soldering flux containing the following compounds is encompassed by the instant composition. The use of the composition as recited in the instant fails to set a demarcation from the prior art composition.

Art Unit: 1625

## Allowable Subject Matter

5. The method of using the compound of formula I to determine the absolute configuration of a chiral compound is allowable.

JP 63132795 discloses a biphenyl compound embraced by the instant compound of formula I. The soldering flux containing the prior art compound is used on printed-circuit boards for easy cleaning with freon 113. Motivation to modify the prior art method to arrive at the instant invention is lacking.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evelyn Huang whose telephone number is 703-305-7247. The examiner can normally be reached on Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alan Rotman can be reached on 703-308-4698. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-4556 for regular communications and 703-308-4556 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.

Primary Examiner

Art Unit 1625

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July 23, 2003